

We Claim:

1. A negative-working heat-sensitive material for making a lithographic printing plate by direct-to-plate recording, the material comprising in the order given a lithographic base having a hydrophilic surface, an oleophilic imaging layer and a cross-linked hydrophilic upper layer, characterized in that said cross-linked hydrophilic upper layer comprises an organic compound corresponding to one of the following formula :



wherein n is 0 or 1; A is hydrogen, a counter ion or an alkyl group; R1 is an organic radical; and R2 is a macromolecular organic radical.

2. A material according to claim 1 wherein the organic compound derived is poly(styrene sulfonic acid) or a salt thereof, or poly(vinyl phosphonic acid) or a salt thereof.
3. A material according to claim 1 wherein the oleophilic imaging layer has a dry coating weight between 0.1 and 0.75 g/m<sup>2</sup>.
4. A material according to claim 1 wherein the oleophilic imaging layer comprises a heat-sensitive binder.
5. A material according to claim 1 wherein the oleophilic imaging layer comprises carbon black or graphite as IR-absorbing compound.
6. A material according to claim 1 wherein the cross-linked hydrophilic upper layer comprises oxides or hydroxides of beryllium, magnesium, aluminum, silicon, gadolinium, germanium, arsenic, indium, tin, antimony, tellurium, lead, bismuth, titanium or a transition metal.

7. A material according to claim 1 wherein the lithographic base is a grained and anodized aluminum support or a flexible support provided with a cross-linked hydrophilic base layer.
8. A material according to claim 1 wherein the cross-linked hydrophilic upper layer has a dry thickness between 0.3 and 5  $\mu\text{m}$ .
9. A direct-to-plate method of making a lithographic printing plate comprising the steps of
  - (i) providing a material according to any of the preceding claims;
  - (ii) image-wise exposing the material to an infrared laser beam having an intensity higher than  $0.1 \text{ mW}/\mu\text{m}^2$ ;
  - (iii) contacting the material with fountain solution and ink.
10. A method according to claim 9 wherein, before or after step (ii), the material is mounted on a cylinder of a printing press.